



Date: February 1, 2016

To: Thomas J. Bonfield, City Manager
Through: Keith Chadwell, Deputy City Manager
From: Mark D. Ahrendsen, Transportation Director

Subject: U-3308 NC 55 (Alston Avenue) Widening Supplemental Transportation Improvement Program (TIP) Agreement

Executive Summary

The N. C. Department of Transportation (NCDOT) is scheduled to widen NC 55 (Alston Avenue) from NC 147 to NC 98 (Holloway St.) to a four-lane divided raised median facility. Project bidding begins in June 2016 with two years of construction. In addition to widening Alston Avenue, the project includes replacing the Alston Avenue bridge over NC 147, the Pettigrew Street bridge over Alston Avenue, and the North Carolina Railroad bridges over Alston Avenue. The City of Durham and NCDOT executed a municipal agreement to provide federal and City funding for new sidewalks and streetscape elements in May 2015. During the project development process, the City requested that NCDOT initially designate the outside lanes between Main Street and Holloway Street for on-street parking until such time that the traffic volumes warrant four lanes. NCDOT agreed subject to the City being responsible for restriping the roadway in the future. A supplemental TIP agreement is necessary to add provisions that require the City to be responsible for the restriping when traffic volumes reach 20,000 vehicles per day and that require the City to be responsible for maintenance of the new Pettigrew Street bridge over Alston Avenue. A map of the overall project is provided in Attachment A.

Recommendation

The Department of Transportation recommends that the City Council authorize the City Manager to execute the U-3308 NC 55 (Alston Avenue) Supplemental Transportation Improvement Program (TIP) Agreement with the N. C. Department of Transportation.

Background

Widening Alston Avenue from NC 147 to Holloway Street has been an element of the DCHC MPO's long-range plan for many years. NCDOT first initiated the planning for this project with community meetings in 2003. Due to the complexity of widening in this dense, urban area with several historic structures and important community resources and businesses along the corridor, the environmental study was not completed until 2013. The project was modified and redesigned several times throughout this process in response to requests by the City, community residents, and to address environmental justice issues. The Right-of-Way Consultation Report signed by NCDOT and the

Federal Highway Administration in February 2013 includes the final project commitments for the project. NCDOT is currently acquiring right-of-way for the project.

The project includes widening Alston Avenue to four lanes from just south of NC 147 to just north of NC 98 (Holloway Street). The Alston Avenue bridge over NC 147, the Pettigrew Street bridge over Alston Avenue, and the North Carolina Railroad bridges over Alston Avenue will be replaced. Initially, Alston Avenue from NC 147 to Main Street will be striped for 11-foot inside lanes and 14-foot outside lanes, and Alston Avenue from Main Street to Holloway Street will be striped for one 11-foot lane in each direction, 4-foot bike lanes, a 4-foot buffer area, and a 8-foot parking area. The section from Main Street to Holloway Street can be converted to four traffic lanes when the Average Daily Traffic reaches 20,000 vehicles per day. There will be a median for most of the project length, and the City has requested landscaping within the median where possible. To minimize impacts to the Golden Belt Historic District, Worth Street, Franklin Street, and Wall Street on the west side of Alston Avenue will be converted to one-way streets, and Wall Street on the east side of Alston Avenue will become a cul-de-sac. The City will be responsible for the installation of streetlights through Duke Energy. Pedestrian lighting under the bridges is included in the project.

During the preparation of the environmental document by NCDOT, the project was redesigned to avoid taking the Los Primos grocery store at the northwest corner of Main Street and Alston Avenue. NCDOT determined that taking Los Primos would have had a disproportionately high and adverse effect on a minority and low-income community. The redesign of the project shifted Alston Avenue to the east. The widened roadway will fit in between Los Primos and the Durham Rescue Mission buildings. Several other changes were made to the design of the project during the environmental study including lowering the design speed, tightening curb radii at intersections, and the elimination of exclusive right-turn lanes at most intersections to shorten the crossing distance for pedestrians and calm traffic.

Issues and Analysis

As requested by the City Council in 2011, NCDOT agreed to initially stripe the section of Alston Avenue from Main Street to Holloway Street for one 11-foot lane in each direction, 4-foot bike lanes, a 4-foot buffer area, and an 8-foot parking area. The City requested this due to concerns about the increased volume and speed of traffic for a four-lane section and the negative impact on pedestrian safety. The traffic volumes generally decrease from NC 147 heading north to Holloway Street, and the volume of traffic north of Main Street can be initially accommodated by a two-lane section. Furthermore, traffic forecasting done as part of the development of the East End Connector project showed that the East End Connector will divert some traffic from local north-south arterials including Alston Avenue once it is complete.

2013 Traffic Volumes:

Location	Vehicles per Day
Between Gann Street and the Pettigrew Street Overpass	19,000
Between the Pettigrew Street Overpass and Angier Avenue	22,000
Between Angier Avenue and Main Street	19,000
Between Main Street and Morning Glory Avenue	19,000
Between Eva Street and Holloway Street	17,000

As part of NCDOT's agreement for this initial configuration, NCDOT required that the City be responsible for restriping the roadway to the four-lane section once traffic volumes reach 20,000 vehicles per day. The above traffic volumes are the most recent figures from 2013. The traffic volumes on this section of Alston Avenue have increased in recent years and are near 20,000 vehicles per day. When the City made this request in 2011, the most current 2009 traffic volumes showed a maximum of 17,000 vehicles per day north of Main Street. The East End Connector project is expected to help limit or reduce near-term traffic growth in the Alston Avenue corridor.

The supplemental agreement also requires that the City of Durham assume responsibility for the new Pettigrew Street bridge over Alston Avenue. Pettigrew is a City-maintained street and the City is responsible for maintaining its streets and bridges. However, NCDOT has performed all maintenance on the current Pettigrew Street bridge over Alston Avenue since it was constructed in 1951. This agreement will officially transition the maintenance responsibility of the bridge to the City of Durham.

Alternatives

- Authorize the City Manager to execute the Supplemental Transportation Improvement Program (TIP) Agreement for U-3308 NC 55 (Alston Avenue) Widening.
- Do not authorize the execution of the Supplemental Transportation Improvement Program (TIP) Agreement for U-3308 NC 55 (Alston Avenue) Widening. The project cannot proceed without City concurrence.

Financial Impact

There is no initial cost for this supplemental agreement, but there will be future costs associated with the restriping and the maintenance of the bridge.

SDBE Summary

NCDOT agreements require that their contracting procedures be followed for these projects. The Department of Equal Opportunity/Equity Assurance did not review this item for compliance with the Ordinance to Promote Equal Business Opportunities in City Contracting.

Attachments

A – Project Map

B – Supplemental TIP Agreement